

1 Identification of substance:

- **Product details:**
- **Trade name:** Hilti Two-stroke oil DSH
- **Container size:** 1 L / 1.057 qt / 33.8 fl.oz.
- **Application of the substance / the preparation:** Oil for air-cooled two-stroke engines.
- **Manufacturer/Supplier:**
Hilti Deutschland GmbH
Hiltistr. 2
D-86916 Kaufering
Tel +49 8191 90-0
Fax +49 8191 90-1122
Customer Service:
Tel 0800-8885522 toll free
Fax 0800-8885523 toll free
- **Informing department:** see section 16
- **Emergency information:**
Hilti Deutschland GmbH
Tel: 0049 8191 90-0
Fax: 0049 8191 90 1122
Schweizerisches Toxikologisches Informationszentrum - 24 h Service
Tel.: 0041 / 1 251 51 51 (international)



2 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment**
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Restricted to professional users.
To avoid risks for humans and environment obtain instructions.
- **Classification system**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:**
Mixture of the substances listed below with harmless additions.

· **Dangerous components:**

CAS: 64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	 Xn,  N; R 10-51/53-65	10-20%
EINECS: 265-185-4			

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **After inhalation**
Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor after significant exposure.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, call a physician.
- **After eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- **After swallowing** Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** High volume water jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Sulphur dioxide (SO₂)
- **Protective equipment:** In the event of fire, wear self contained breathing apparatus

6 Accidental release measures

- **Person-related safety precautions:**
Particular danger of slipping on leaked/spilled product.
Product forms slippery surface when combined with water.
wearing gloves

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- Keep away from ignition sources
- In case of transport accidents:
mark roads and warn other road users. keep public away; risk of explosion keep away from ignition sources and open fire; no smoking
- **Measures for environmental protection:**
Prevent from spreading (e.g. by damming-in or oil barriers).
Do not allow to enter drainage system, surface or ground water.
Do not allow to enter the ground/soil.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Keep containers tightly sealed.
Provide sufficient air exchange and/or exhaust in work rooms. When using, do not eat, drink or smoke. Ingestion, exposure to skin and eyes and inhalation of any general vapours should be avoided.
Keep away from heat and direct sunlight.
Do not inhale the vapours released during application.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
- **Storage**
- **Requirements to be met by storerooms and containers:**
Prevent any penetration into the ground.
Use only containers specifically permitted for this substance/product.
Keep packaging securely closed and dry, store at +5 C.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from flammable substances.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Storage class**
As per VCI (1991) storage classification concept.
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8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Take off immediately all contaminated clothing
Do not inhale gases / fumes / aerosols.
Do not carry cleaning cloths impregnated with the product in trouser pockets.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
- **Breathing equipment:**
Not necessary if room is well-ventilated.
Avoid breathing the vapours above the decomposition temperature.
- **Protection of hands:** Oil resistant gloves
- **Material of gloves:** Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

· General Information

Form:	Fluid
Colour:	Red
Odour:	Characteristic

· Change in condition

Melting point/Melting range: Not determined

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· Boiling point/Boiling range:	Not determined
· Flash point:	67°C (DIN 2592)
· Ignition temperature:	Not determined
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Density at 20°C	0,867 g/cm ³ (ASTM 4052)
· Solubility in / Miscibility with Water:	Unsoluble
· pH-value:	Not applicable
· Viscosity: kinematic at 40°C:	50 mm ² /s (DIN 51562-1)

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Dangerous reactions**
none, if used as directed
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised
- **Dangerous products of decomposition:** none, if stored and handled correctly.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy

Oral | LD50 | > 2000 mg/kg (ratte)

· **Primary irritant effect:**

- **on the skin:** not determined
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

According to documentation, the mixture of aliphatic, naphthene hydrocarbons (aromatic substance content < 0,5%) has a mildly irritating effect on the skin and mucous membranes, removes skin oils and has a narcotic effect.
If lung tissue is directly affected (e.g. through aspiration), pneumonia/inflammation of the lungs is possible.

12 Ecological information:

- **General notes:** Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13 Disposal considerations

· **Product:**

· **Recommendation**

For disposal, local regulations issued by the authorities must be observed.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
When storing used mineral oil products, ensure that the categories for waste oil and mixing instructions are observed.
Hand over to disposers of hazardous waste.
Delivery of waste oil only to offically authorized collectors.

· **European waste catalogue**

13 00 00	OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19)
13 02 00	waste engine, gear and lubricating oils
13 02 05	mineral-based non-chlorinated engine, gear and lubricating oils

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **Remarks:** Not classified as dangerous goods in terms of the ADR

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- **Maritime transport IMDG:**
- **Remarks:** Not classified as dangerous goods as per above regulation.
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:** - -
- **Hazard-determining components of labelling:**
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated
Kerosine (petroleum), hydrodesulfurized
- **Risk phrases:**
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
23 Do not breathe fumes/aerosol.
24 Avoid contact with skin.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.
62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
- **Special designation of certain preparations:**
Restricted to professional users.
To avoid risks for humans and environment obtain instructions.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
10 Flammable.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65 Harmful: may cause lung damage if swallowed.
- **Department issuing data specification sheet:**
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Business Area Electrical Tools & Accessories

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- *** Data compared to the previous version altered.**